

WHAT IS CLAIMED IS:

1. A process for making a granular detergent composition comprising the steps of mixing at least two materials selected from the group consisting of dry agglomerates, wet agglomerates, spray dried granules, and detergent adjunct ingredients in at least one mixer selected from the group consisting of a low-speed mixer, a moderate-speed mixer, a high-speed mixer, and combinations of mixers thereof, to form particles, wherein the granular detergent composition comprises at least about 50% by weight of the particles having a geometric mean particle diameter of from about 500 microns to about 1500 microns with a geometric standard deviation of from about 1 to about 2.
2. The process according to Claim 1, further comprising the step of conditioning the resultant particles in at least one conditioning apparatus.
3. The process according to Claim 1, wherein the mean residence time of the low-speed mixer is from about 30 seconds to about 1800 seconds, the mean residence time of the moderate-speed mixer is from about 30 to about 1800 seconds, and the mean residence time of the high-speed mixer is from about 0.1 to about 60 seconds.
4. The process according to Claim 2, wherein the step of conditioning includes at least one fluid bed granulator.
5. The process according to Claim 3, wherein the tip speed of the low-speed mixer is from about 0.1 m/s to about 10 m/s, the tip speed of the moderate-speed mixer is from about 0.1 m/s to about 30 m/s, and the tip speed of the high-speed mixer is from about 3 m/s to about 90 m/s.
6. The process according to Claim 4, wherein fines generated from the fluid bed granulator are recycled to at least one mixer.
7. The process according to Claim 1, wherein the mixer contains a ratio of dry agglomerates to spray dried granules from about 5:95 to about 95:5.

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9. The process according to Claim 4, wherein the fluid bed granulator has a mean residence time from about 30 seconds to about 20 minutes.
10. The process according to Claim 1, wherein the low-shear mixer is a fluid bed granulator.
11. A process for making a granular detergent composition comprising the steps of
- (a) mixing at least two materials selected from the group consisting of dry agglomerates, wet agglomerates, spray dried granules, and detergent adjunct ingredients in at least one mixer selected from the group consisting of a low-speed mixer, a moderate-speed mixer, a high-speed mixer, and combinations of mixers thereof, to form particles, and
- (b) conditioning the resultant particles in at least one conditioning apparatus, wherein the mean residence time of the low-speed mixer is from about 30 seconds to about 1800 seconds, the mean residence time of the moderate-speed mixer is from about 30 to about 1800 seconds, and the mean residence time of the high-speed mixer is from about 0.1 to about 60 seconds, and wherein the granular detergent composition comprises at least about 50% by weight of the particles having a geometric mean particle diameter of from about 500 microns to about 1500 microns with a geometric standard deviation of from about 1 to about 2.
12. The process according to Claim 11, wherein the step of conditioning includes at least one fluid bed granulator.
13. The process according to Claim 12, wherein the operating conditions of the fluid bed granulator include (i) from about 30 seconds to about 20 minutes of mean residence time, (ii) from about 100 mm to about 600 mm of depth of unfluidized bed, (iii) not more than about 100 microns of droplet spray size, (iv) from about 150 mm to about 1600 mm of spray height, (v) from about 0.1 to about 4.0 m/s of fluidizing velocity and (vi) from about 12°C to about 200°C of bed temperature.